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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,165	11/25/2003	Rolf Huss	5298-67RE	7519
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			3746	
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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		А	pplication No.	Applicant(s)				
Office Action Summary			0/722,165	HUSS, ROLF				
			xaminer	Art Unit				
		P	hilip Stimpert	3746				
Period fo	The MAILING DATE of this commun or Reply	nication appear	rs on the cover sheet	with the correspondence a	ddress			
WHIC - Exter after - If NC - Failu Any (	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE IN INSIGN SOLUTION OF THE INSIGN OF THE INSI	MAILING DATE s of 37 CFR 1.136(a munication. tatutory period will a y will, by statute, cau	E OF THIS COMMUI ). In no event, however, may pply and will expire SIX (6) M use the application to become	NICATION. The a reply be timely filed  ONTHS from the mailing date of this ABANDONED (35 U.S.C. § 133).				
Status								
1)	Responsive to communication(s) file	ed on 25 Nove	ember 2003					
2a)□	•		tion is non-final.					
3)		<i>′</i> —		atters, prosecution as to th	ne merits is			
٥/ك	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
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Dispositi	on of Claims							
4)🛛	Claim(s) <u>1-26</u> is/are pending in the application.							
	4a) Of the above claim(s) <u>24-26</u> is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
6)⊠								
7) 🖂	Claim(s) 20 and 21 is/are objected	to.						
	Claim(s) <u>24-26</u> are subject to restric		ection requirement.					
Applicati	on Papers							
	The specification is objected to by the	o Evaminar						
•			a) 🛛 accepted or b	□ objected to by the Eve	minor			
10)[	10)☑ The drawing(s) filed on <u>25 November 2003</u> is/are: a)☑ accepted or b)☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
					DED 4 4047 IV			
44)[7]	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)⊠ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	ınder 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
2)  Notic 3)  Inform	t(s)  e of References Cited (PTO-892)  e of Draftsperson's Patent Drawing Review (Internation Disclosure Statement(s) (PTO/SB/08)  r No(s)/Mail Date	PTO-948)	Paper N	w Summary (PTO-413) lo(s)/Mail Date of Informal Patent Application 				

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#### **DETAILED ACTION**

## Reissue Applications

Applicant is reminded of the continuing obligation under 37 CFR 1.178(b), to timely apprise the Office of any prior or concurrent proceeding in which Patent No.
 6,322,336 is or was involved. These proceedings would include interferences, reissues, reexaminations, and litigation.

Applicant is further reminded of the continuing obligation under 37 CFR 1.56, to timely apprise the Office of any information which is material to patentability of the claims under consideration in this reissue application.

These obligations rest with each individual associated with the filing and prosecution of this application for reissue. See also MPEP §§ 1404, 1442.01 and 1442.04.

- 2. The reissue oath/declaration filed with this application is defective because it fails to contain the statement required under 37 CFR 1.175(a)(1) as to applicant's belief that the original patent is wholly or partly inoperative or invalid. See 37 CFR 1.175(a)(1) and see MPEP § 1414. The reissue oath/declaration filed with this application is defective because it fails to identify at least one error which is relied upon to support the reissue application. See 37 CFR 1.175(a)(1) and MPEP § 1414.
- 3. Further, the reissue oath/declaration filed with this application is defective because it fails to contain a statement that all errors which are being corrected in the reissue application up to the time of filing of the oath/declaration arose without any deceptive intention on the part of the applicant. See 37 CFR 1.175 and MPEP § 1414.

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4. Claims 1-26 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action.

### Election/Restrictions

- 5. Newly submitted claims 24-26 directed to an invention that is independent or distinct from the invention originally as set forth below.
- 6. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-23, drawn to a lubricating device, classified in class 417, subclass 442.
  - Claims 24-26, drawn to a method for lubrication, classified in class 417, subclass 53.

The inventions are distinct, each from the other because of the following reasons:

7. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by a materially different apparatus, such as an electronically controlled pump with pressure sensors for detecting the pressure levels of claim 24 and electrically actuated valves responding to those pressure levels.

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8. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C.101 and/or 35 U.S.C. 112, first paragraph.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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9. The examiner has required restriction between product and process claims.

Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder.

All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

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In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for

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prosecution on the merits. Accordingly, claims 24-26 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP §§ 821.03 and 1450.

## Oath/Declaration

10. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01, 602.02 and 1414.

The oath or declaration is defective for the following reasons:

It does not state that the person making the oath or declaration believes the named inventor or inventors to be the original and first inventor or inventors of the subject matter which is claimed and for which a patent is sought.

It does not state that the person making the oath or declaration has reviewed and understands the contents of the specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration.

It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

## Specification

11. The specification is objected to for the following informality: the amended paragraph of the specification beginning at col. 8, ln. 14, the substitution of a reference to Fig. 8 as opposed to Fig. 9 appears to be erroneous. The structure being described in this paragraph is the locking mechanism, which is shown in Fig. 9, whereas col. 8 is a pressure vs. time graph. Appropriate correction is required.

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## Claim Objections

12. Claim 6 objected to because of the following informalities: line 2 of the claim recites "a control circuit." This limitation is entirely without antecedent basis in the specification and claims. The examiner believes this limitation is intended to recite "a control conduit," and this claim will be so interpreted. Appropriate correction is required.

13. Claim 19 is objected to because of the following informalities: the word "A" appears to have been deleted from the beginning of the claim. Appropriate correction is required.

## Claim Rejections - 35 USC § 112

- 14. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 15. Claims 3-5, 10-12, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 16. Regarding claim 3, the limitation "the outlet conduits," in lines 2-3 lacks antecedent basis in the claim.
- 17. Regarding claim 4, the limitation "the control conduit," in line 2 lacks antecedent basis in the claim.
- 18. Regarding claim 5, the limitation "its jacket face" in line 3 lacks antecedent basis in the claim. The examiner notes that neither a jacket nor a face thereof have been previously recited.

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19. Regarding claim 10, the limitation "the stepping motor" in line 2 lacks antecedent basis in the claim.

- 20. Regarding claim 12, the limitation "the control motor" in lines 1-2 lacks antecedent basis in the claim.
- 21. Regarding claim 17, the limitation "outlet conduits" in lines 2-3 lacks antecedent basis in the claim.

## Claim Rejections - 35 USC § 102

22. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 23. Claims 1-9 and 13-16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hoch et al. (US 4,412,519), as evidenced by Galvin (US 5,097,803).
- 24. Regarding claim 1, Hoch et al. teach a pump (lubricating device) for supplying a plurality of stations. As disclosed by Hoch et al., their pump is for fuel injection of a diesel engine, however, the pump is capable of performing the function of supplying lubricant to lubricating stations in a knitting machine and would comprise a lubricating device in that application. Further, diesel fuel inherently functions as a lubricant to a certain extent, as evidenced by Galvin's statement "lubrication in the normal course of events being provided by the diesel fuel," (col. 3, ln. 63-64). In particular, Hoch et al. teach that the lubricating device includes a pump device (5) for pumping lubricant, the

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pump device (5) having a piston (30) supported axially displaceably in a cylinder (31) and having a distributor device (32, 35) by which the lubricant pumped by the piston (30) is to be distributed to a line (35) of a group of lines (35, see col. 3, ln. 44-53) leading away from the distributor device, the distributor device being part of the pump device (5) and the piston (30) being connected to a locking device (43, 52) which arrests the piston (30) in a manner fixed against relative rotation in selected rotary positions while allowing an axial motion (col. 5, ln. 1-13).

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- 25. Regarding claim 2, Hoch et al. teach that the cylinder (31) has a plurality of outlet conduits (36) which are controllable by the piston (30).
- 26. Regarding claim 3, Hoch et al. teach that the cylinder (31) has a cylindrical cylinder wall (20) and that outlet conduits (36) are disposed penetrating the cylinder wall (20, see Fig. 1).
- 27. Regarding claims 4-6, Hoch et al. teach that the lubricating device comprises a control conduit (32, 33) in the piston communicating with its outer face (jacket face), and that the control conduit (32, 33) can be brought into coincidence with one of the outlet conduits (36) by rotation of the piston (30) and thereby forms the distributor device.
- 28. Regarding claim 7, Hoch et al. teach that the piston (30) is rotatably supported (col. 4, ln. 47, "rotation of the plunger 30") in the cylinder (31).
- 29. Regarding claim 8, Hoch et al. teach that the lubricating device comprises a drive device (3, 4, 41, 42, 68) connected to the pump device (5) and the distributor device (32, 35), the drive device including a rotator device (41, 42) and a displacement device (3, 4), both the rotator and displacement devices being attached to the piston (30).

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30. Regarding claim 9, Hoch et al. teach that the lubricating device is driven by an engine (col. 2, ln. 45) which constitutes a control motor generating a desired rotary positioning motion via the rotator device (41, 42).

- 31. Regarding claim 13, Hoch et al. teach that the locking device (43, 52) includes a locking member (52) which can be brought in and out of engagement (via bolt 56) with a locking wheel (43) that is connected to the piston (30) in a manner fixed against relative rotation.
- 32. Regarding claim 14, Hoch et al. teach that the locking member (52) can be switched into and out of engagement by means of a positioning drive (56).
- 33. Regarding claim 15, as shown in Fig. 2, Hoch et al. teach that the locking wheel (43) is embodied as a ratchet wheel and the locking member (52) is embodied as a pawl.
- 34. Regarding claim 16, Hoch et al. teach a spring (70), spring retainer (71) and cam (4) which together function as a control device which defines the stroke of the piston.

# Claim Rejections - 35 USC § 103

- 35. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 36. Claims 10-12, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoch et al. in view of Galvin and Braun et al. (US 5,181,585).

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- 37. Regarding claim 10, Hoch et al. substantially teach the limitations of claim 9 from which claim 10 depends, as discussed in the above rejection of claim 8 under 35 U.S.C. 102(b)/103(a). Hoch et al. do not teach a stepping motor which can be connected to the piston (30) by a coupling device. Braun et al. teach a lubricating device for a knitting machine in which a distributor is moved to a selective rotary position by a stepping motor (40) which is connected to the distributor in a rotationally fixed manner by a gear (39). Braun et al. teach that the use of such a stepping motor allows for "relatively simple, precise activation of the distributor element," (col. 3, ln. 60-65). Also, those of ordinary skill would note the similarities between the distributors of Braun et al. and Hoch et al., such as selection of dispensing target by rotary positioning. Further, one of ordinary skill would appreciate that the rotator device (41, 42) of Hoch et al. would function equally when converting reciprocal motion to rotational motion, or vice versa, such that a stepping motor such as that taught by Braun et al. could be used to drive the pump of Hoch et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute a stepping motor and gear as taught by Braun et al. for the driveshaft and cam of Hoch et al. as the prime mover of the pump of Hoch et al. in order to take advantage of the simple, precise activation taught by Braun et al.
- 38. Regarding claim 11, as taught by Braun et al., the coupling device (39) has a defined rotary play, in that the gears of the stepping motor and distributor element (piston, in the combination) intermesh so as to delimit the amount of rotary play in the interface.

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39. Regarding claim 12, Braun et al. teach that the control motor is a stepping motor (40, col. 3, ln. 64-65).

- 40. Regarding claim 17, Braun et al. teach that it is known (col. 1, ln. 38-42) to provide check valves at appropriate points in a knitting machine lubrication pump, which those of ordinary skill would expect to prevent undesirable backflow of lubricant.

  Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the pump of Hoch et al. as modified by Braun et al. with check valves in the inlet and outlet conduits in order to prevent undesirable backflow of lubricant.
- 41. Regarding claim 19, Hoch et al. teach a pump (lubricating device) for supplying a plurality of stations. As disclosed by Hoch et al., their pump is for fuel injection of a diesel engine, however, the pump is capable of performing the function of supplying lubricant to lubricating stations in a knitting machine and would comprise a lubricating device in that application. Further, diesel fuel inherently functions as a lubricant to a certain extent, as evidenced by Galvin's statement "lubrication in the normal course of events being provided by the diesel fuel," (col. 3, ln. 63-64). In particular, Hoch et al. teach that the lubricating device includes a pump device (5) for pumping lubricant, the pump device (5) having a piston (30) supported axially displaceably in a cylinder (31) and having a distributor device (32, 35) by which the lubricant pumped by the piston (30) is to be distributed to a line (35) of a group of lines (35, see col. 3, ln. 44-53) leading away from the distributor device, the distributor device being part of the pump device (5). According to the combination, the pump device (5) and the distributor device

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(32, 35) of Hoch et al. are connected to a drive device which includes a rotator device (stepping motor 40 as taught by Braun et al.) and a displacement device (41, 42, as taught by Hoch et al.), which the piston (30) of Hoch et al. connected to both the displacement device and the rotator device, the displacement device being actuated by the rotator device, the displacement device (41, 42, Hoch et al.) constituting a gear which converts rotation of the piston (30, Hoch et al.) relative to the rotator device (40, Braun et al.) into linear reciprocation of the piston.

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42. Regarding claim 22, Hoch et al. teach a lubricating device for a plurality of lubricating stations in a machine, comprising a combined pump and distributor unit (5) including a piston (30) supported to be axially displaceable and rotatable in a cylinder (31), the piston having a control groove (35) adapted to eject the lubricant therethrough toward the lubricating stations due to the axial displacement of the piston (30) within the cylinder (31), a wall (20) of the cylinder having a plurality of radial openings (36) with which the control groove (35) is sequentially alignable as the piston is rotated within the cylinder. As modified by Braun et al., the lubricating device of Hoch et al. also includes pump drive means (grooves 41, 42 and spring 70 as taught by Hoch et al.) for axially displacing the piston within the cylinder to eject lubricant through the control groove (35), and distributor drive means (stepping motor 40 and gear 39 of Braun et al.) for rotating the piston (30, Hoch et al.) into sequential alignment with the openings (36, Hoch et al.) in the cylinder wall (20, Hoch et al.), wherein the pump drive means and the distributor drive means are operable separately from each other. For instance, in normal operation, the would function cooperatively to produce simultaneous rotation

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and reciprocation. The bolt (56) of Hoch et al. could be released to allow the spring (70) to cause axial movement of the piston (30), and the stepping motor of Braun et al. would then produce only rotation of the piston if actuated.

- 43. Regarding claim 23, according to the combination, the pump drive means and the distributor drive means are components of one drive device.
- 44. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoch et al. in view of Galvin and Moriya et al. (US 5,597,051).
- 45. Hoch et al. substantially teach the limitations of claim 1 from which claim 18 depends, as discussed in the above rejection of claim 1 under 35 U.S.C. 102(b)/103(a). Neither Hoch et al. nor Galvin teach the use of sensors to monitor motion of a piston. Moriya et al. teach the use of position sensors to monitor a pump and distributor. Those of ordinary skill would appreciate that such monitoring could provide useful control feedback for the precise control of the pump of Hoch et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a position sensor as taught by Moriya et al. in order to provide control feedback for the pump of Hoch et al.

# Allowable Subject Matter

46. Claims 20-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Stimpert whose telephone number is (571)270-1890. The examiner can normally be reached on Mon-Fri 7:30AM-4:00PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/ Supervisory Patent Examiner, Art Unit 3683

/P. S./ Examiner, Art Unit 3746 26 March 2008